

understood what influence may be exerted by the right spermatic valve in preventing the development of the disease upon that side; and may not the same law obtain, in the explanation of varix of the left ovarian vein, since we have in the female an analogous locality to the valve?

#### EXPLANATION OF PLATE.

Dissection of the vena cava, emulgent, and spermatic veins, showing the right spermatic valve, and its accompanying sinus.

- c. Vena cava.
  - e. Emulgent vein.
  - r. Right spermatic vein.
  - l. Left spermatic vein.
  - a. Aperture by which the right spermatic vein empties into the vena cava.
  - v. Right spermatic valve.
  - s. Sinus, across which the valve is stretched.
  - f. Termination of the left spermatic vein, in the emulgent vein.
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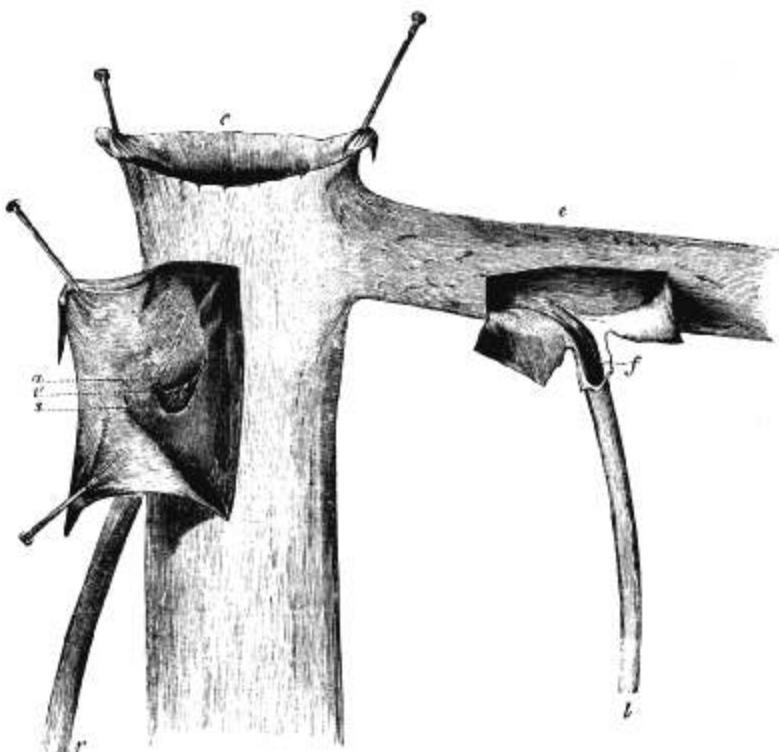
ART. V.—*Case of Spinal Apoplexy.* By ISAAC G. PORTER, M. D., of New London, Conn.

So rarely do we meet with cases of this nature, or even of spinal congestion terminating fatally, that the following example, though deficient in some of its details, may be interesting.

"Spontaneous effusion of blood into the cervical, dorsal, or lumbar portions of the cord, is an occurrence of extreme rarity, and its history is, consequently, very defective. The cases recorded by Abercrombie, Chevalier, Stroud, Cruveilhier, and others, show that the attack is always characterized by acute and sudden pain in the back, corresponding with the seat of the effusion. Sometimes there are precursory symptoms of shivering, and in others there is sudden paralysis of one or more of the lower extremities, below the seat of pain. The other symptoms that have been observed are similar to those we have noticed while treating of myelitis, affecting the cervical, dorsal, or lumbar portion of the cord."—*Tweedie's Lib. of Med.*, vol. ii. p. 324.

In 386 recorded cases of apoplexy, Andral notices the effusion as occurring eight times within the spinal canal.

A talented and opulent merchant, largely engaged in commerce, was busily engaged from early dawn until afternoon of an intensely hot day in September last, in getting to sea one of his ships. He was forty years of age, and his general health good, although there is in the family a proclivity to plethoric, congestive, and paralytic diseases. He had drank freely, though prudently, of cold liquids, and, after the ship had sailed, went into a barber's



Dissection of the vena cava, emulgent and spermatic veins,  
showing the right spermatic valve.

shop about 5 o'clock P. M., and had his head "shampooed," as he had occasionally done before. Heated and exhausted as he was, the irrigation of the water, as it flowed over the back of his head and neck, was, for a time, very grateful, though it had been standing, as was said, the most of the day in the room. He soon, however, became chilly, and was seized with a violent pain in the lower part of his back, and, on attempting to leave the shop, became partially paralyzed; and he was obliged, soon after, to stand motionless in the street for some minutes. The powerlessness then seemed gradually to leave him, and he was able to walk, though with difficulty, his gait being noticeably changed, as observed by his friends. About half an hour after, he was again seized with pain in the back and numbness, and loss of power in the lower limbs, attended with a very severe chill; yet the palsy was not severe enough to prevent his walking home at 6 P. M., when he went immediately to bed. By advice of friends, he took hot stimulant drinks and teas, hot pediluvia, and had bottles of hot water placed around him. He soon emerged from the chill, and moderate reaction came on, but complained greatly of pain in the back, and numbness of his extremities. A little before 10 o'clock P. M. I saw him—intellect perfect; countenance anxious, though disposed to think lightly of his disease, saying he should be at his store in the morning; shaking with the cold at the slightest motion of the bedclothes; gentle perspiration, but the hands cold and clammy when exposed to the air. The pain in the back, and numbness, still continued, and new distress, like colic, had lately manifested itself in the abdomen, with a most urgent desire for a passage from the bowels. A free motion had occurred just before the attack, and, previous to my arrival, he had endeavoured to use the close-stool, but immediately on rising, with help, into the upright position, he had fainted. Insisting on making a second attempt, he arose with help, but rather *fell* than *sat* in the chair. Immediately his head dropped on his chest, his breathing became stertorous, and the muscles began to show convulsive action. Contrary to my express command, he afterwards made another attempt, with the same result, and on coming to himself he said: "I am truly in a critical situation, and will make no further effort." There was desire to pass water, but it was by no means so urgent, and none passed him during life. From 11 o'clock P. M. of Tuesday night until 4 P. M. of the following day, when he expired, he maintained the horizontal position, except as he vomited twice in the night, and slightly turned from side to side, with restlessness and jactitation from pain in the bowels and back. His pulse, as I entered the room, was a mere thread, contrasting strongly with his flushed and congested countenance. The slightest pressure annihilated it, and after effort on his part it was entirely gone.

The aspect of the case, at the outset, was almost hopeless, and the symptoms progressed with rapid strides towards a fatal termination. About 4 o'clock in the morning his acute distress left him; the pulse slightly rose in volume and power under the use of stimulants and nourishment, and by crowding them it was for a short time maintained, but soon either the stomach rejected them, or they ceased to have anything more than a momentary influence. He soon after became somnolent, though he was aroused without difficulty until within an hour or two of his death, and always showed a good share of intelligence, and answered questions promptly and properly. While apparently asleep, he occasionally uttered incoherent expressions, but on being aroused, was perfectly conscious. Showing how naturally and spontaneously our thoughts flow in their accustomed channels, shortly before he expired he said in a firm voice, "I believe that everything is aboard," which were his last words. "Even in our ashes, live their wonted fires."

Soon after dissolution, remarkable evidence of venous engorgement presented itself. The entire surface of the body appeared as if deeply ecchymosed or cyanosed. The colour was uniform and permanent.

There were unusual reasons for preserving the body as long as possible, and the weather was very hot and oppressive. Much as a *post-mortem* examination was desired, yet these reasons, and the mechanical difficulties to be overcome being so great in exposing the vertebral canal, and the want of suitable instruments, all conspired to render it impracticable.

The treatment in this case was directed, at the outset, to obviating the alarming prostration. Ignorant, at that time, of the cold douche, the chills in the barber's shop, and the subsequent loss of muscular power, the debility was referred to some unknown *functional* derangement, and alcoholic drinks, sulph. ether, and aromat. spts. ammo. were freely used with animal broths; and externally, fomentations were applied to the abdomen, and Granville's lotion, sinapisms, and a blister to the back. Leeches were proposed to the medical gentlemen in consultation, but declined on account of the adynamia. The influence of medication was momentary and trifling.

This case, so rapid in its progress towards dissolution, possesses some peculiarities which may repay examination. Deprived, as we are, of the positive testimony of a *post-mortem* examination, we are compelled to examine it *per vias exclusionis*, and much in the same way as if the patient, after having been exceedingly ill, had finally recovered. Was it, then, a case of cerebral congestion, or apoplexy? This latter supposition must be excluded by the existence and continuance of consciousness and intellect until just before death. Was it a case of acute myelitis? The symptoms, in some respect, pointed to that affection, but the attack was much more sudden and violent than is usual in that disease, and the termination more speedy—myelitis proving fatal, usually, from the fifth to the tenth day; and, at no time, were symptoms of active inflammation present. Spinal meningitis is also excluded by the absence of tonic rigidity and increased sensibility, which characterize that affection.

Was it a case of simple venous engorgement of the medulla spinalis? or was this state accompanied or succeeded by serous or sanguineous effusion within the canal? The leading symptoms, at the outset, were pain in the back, and paralysis of the lower extremities. These conditions, however, disappeared after a few minutes, so that the patient was able to walk home. Had effusion occurred at the first appearance of these symptoms, it is not possible that the pressure on the medulla spinalis could have been so speedily removed as to have allowed the use of his limbs. But the symptoms returned with renewed violence, and proceeded uninterruptedly to a fatal termination by an apparent extension of an effusion (which then first occurred) upward toward the brain. The severe colic pains in the abdomen will be remembered. These are very common in myelitis of the lumbar portions of the cord, and according to Tweedie, also occur in spinal apoplexy. In the upward progress of the paralysis, the cardiac and pulmonary nerves were finally involved. The powers of the circulation, however, were easily affected,

doubtless through sympathy, and the violence of the nervous shock. It is, therefore, my opinion, that so intense became the congestion in the last attack, that it resulted in a gradual effusion into the spinal canal.<sup>1</sup> "When the symptoms come on slowly, and in an imperfect degree, without anything like a sudden shock, or fit, the effusion is generally of serum." (*Cyc. Med.*, art. Cerebral Apoplexy.) It may have been serous, but from the intense engorgement of the surface of the body immediately after death, and which was doubtless to be attributed, in part, to rupture of the capillaries, we have reason to believe from the condition of the bloodvessels, as thus evinced, that it was sanguineous.

It is a question of some interest, how far the cold douche, on the base of the brain, exerted a noxious influence. The power over the circulation of the blood, by the application of heat and cold, is shown by the influence of sinapis'd foot-bath, and the cold douche, or the ice-cap to the head in congestive headache, threatening apoplexy, or in convulsions, with strong determination of blood to the head. The objection may be offered, that granting a remedial influence in this case, it does not prove the converse, viz: that the same agent may operate at one time as a *cure*, and at another as a *cause*, of a similar affection. Another instance, then, more in point, may be adduced. The very injurious effects on the organism of currents of cold air operating on *limited* portions of the surface, will not be denied—nor the pernicious influence of wet feet on an individual not inured to it by habit, more especially if he be fatigued at the time, and constitutionally infirm. This is probably owing, primarily, to a depressing influence thus exerted on the "automatic nerve force," which, succeeded by irregular circulation in the capillaries, finally results in internal congestions.

Todd, however, in his late valuable work on diseases of the nervous system, has the following words: "It is unsatisfactory in a scientific, and dangerous in a practical point of view, to refer paralysis to local congestion. The vessels of a part, all important as they are to its nutritive and other vital actions, are nevertheless only secondary elements in the condition of the organ, and unless in themselves *diseases*, they can play only a secondary part in the production of organic or functional derangement. Congestion of bloodvessels, or hyperæmia of a part, must be an *effect* either of some disordered state of the intrinsic elements of the tissue or of the blood, or of the forces by which the blood circulates." These are doubtless correct pathological principles, and two of the conditions specified I think we have in the foregoing case—"the disordered condition of the bloodvessels, and of the forces by which the blood circulates." In ordinary health, the cold douche, even when operating on the base of the brain, may have been harmless, but not so when the vital energies were at a low ebb, through a long and exhausting day's exertion in a hot sun. It is under similar circumstances that a draught of cold water

<sup>1</sup> See a case recorded by Walsh, *Lancet*, July, 1849, p. 7.

sometimes proves fatal. The same thing is shown by a fact familiar to "gentlemen of the turf." A horse, although quite warm from exercise in the early part of the day, may drink cold water with comparative impunity, while one-half the amount, if drank at the close of a summer day's travel, would cause his death.

Having thus shown that the forces by which the blood circulates were disordered and enfeebled, as a part of a general affection, a few words only remain in relation to the condition of the bloodvessels. That they were in a morbid state appears from the aspect of the surface of the body immediately after death. Should this be referred to incipient decomposition, the question arises, why does not the same appearance always occur in early decomposition? The innervation and nutrition of the capillaries were doubtless affected at the same time that the congestion occurred in the medulla spinalis, of which softening of these vessels, and ultimate effusion, were the consequence.

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ART. VI.—*Obstetrical Memoranda.* By RICHARD MCSHERRY, M. D., of Baltimore.

*Labours Complicated by Accidental Shortening of the Cord.—Death of the Child from an unusual cause.*—During the past year I attended several cases of labour, protracted for hours after the child's head had reached the perineum, when there was no manifest cause of delay either in the size of the head, or in the condition of the mother. In every case the delay was owing to accidental shortening of the cord. In two cases the children died before delivery, of strangulation, from double folds of the cord closely investing the neck. In another case the cause of death was different, and very uncommon.

On the 18th of Sept. I was called to Mrs. H., rather a delicate young woman in labour with her first child. I found her suffering pretty severely, and vomiting freely of mucus and greenish bile; she told me she had been long very costive, troubled with headache and general *malaise*. In a reasonable time the head began to distend the perineum, the soft parts were relaxed, and the pains were sufficiently active. I promised her a speedy termination of her sufferings, but finding pain after pain fruitless, little gained by each pain and that little lost directly after, I determined to use the forceps. At the expiration of two hours, however, from the time when I first expected each pain to bring the head, it came into the world unassisted, with a single turn of the cord around the shoulders. No effort was required to disengage it; the body followed immediately. Upon looking at the child I observed a large bluish mass overlying the abdomen, which upon examination proved to be the intestines deeply congested. By careful tracing I found they had escaped by a rent at the side of the umbilical cord. They were much distended with meconium, but after some patient manipulation I succeeded in restoring them within the abdominal cavity. Compresses and bands were applied immediately to the tumid abdomen; the child lived feebly for half